

## REMARKS

Favorable reconsideration of this application is respectfully requested.

Claims 18-37 are presently active in this application. Claims 1-17 have been cancelled without prejudice or disclaimer. Claims 18-37 have been added without the introduction of any new matter. In addition, a substitute specification as required in the outstanding Office Action is included herewith. It is noted that this substitute specification includes no new matter.

The outstanding Action presented an objection to the drawings, an objection to the specification which included a requirement for a substitute specification, a rejection of Claims 1-4 and 8 as being anticipated by Sakai (U.S. Patent No. 6,409,838) under 35 U.S.C. § 102(e), a rejection of Claims 1-4 and 8 as being anticipated by Harada et al (U.S. Patent No. 6,402,844, Harada) under 35 U.S.C. § 102(e), a rejection of Claim 5 under 35 U.S.C. § 103 as being unpatentable over Sakai in view of Maeda et al (U.S. Patent No. 5,620,523, Maeda), a rejection of Claims 5-7 under 35 U.S.C. § 103(a) as being unpatentable over Sakai in view of Kwag et al (U.S. Patent No. 6,402,849, Kwag), and a rejection of Claims 9-11 under 35 U.S.C. § 103(a) as being unpatentable over Sakai in view of van de Ven et al (U.S. Patent No. 5,620,525, van de Ven).

Initially, Applicants acknowledge with gratitude the interview granted to their representative on January 28, 2003. During this interview, Applicant's representative discussed new Claims 18 and 28 with the examiner pointing out that the driving and controlling section in each required the stopping of the wafer at the middle position to place it at rest in a stationary condition. While the Examiner acknowledged that none of the applied references included this subject matter, he was reserving his final opinion as to the

allowability of such subject matter pending a new search and review of case law regarding means plus function language like that of Claim 28.

Turning first to the objection to the drawings, it is noted that a drawing correction letter accompanies this amendment seeking approval of the removal of "BR" from Figures 5 and 6. In addition, it is noted that "BUCR" was described at page 19 of the original specification as being a buffer cassette. Accordingly, the objection to the figures illustrating "BUCR" is traversed as this reference sign is described at page 19, line 10 of the original specification. With further regard to the objection to the x and y-axes showing of Figures 5 and 6, it is noted that the substitute specification has been amended at page 15 to refer to the y direction as being the direction along which the cassettes CR are mounted and aligned. Accordingly, the drawings of Figures 5 and 6 and specification are now in agreement and this objection is also respectfully traversed.

With regard to the requirement for a substitute specification in proper idiomatic English and in compliance with 37 C.F.R. § 1.52(a), a substitute specification accompanying this amendment is believed to be in proper idiomatic English and is believed to comply with the noted rules. Applicants have also indicated the required statement that this new substitute specification contains no new matter.

Before considering the outstanding prior art rejections, it is believed that a brief review of the present invention would be helpful. In this regard, the present invention is directed to a silylation treatment unit that has a chamber, a heating mechanism provided in this chamber for heating a substrate that includes a resist film disposed thereon. The unit further includes a supplying mechanism for supplying a vapor including a silylation reagent into the chamber. The unit also has a substrate holder that holds the substrate with the resist thereon in the chamber. A driving and controlling section is provided to drive and control the

substrate holder to cause the substrate holder to keep the substrate in the fixed position at three or more height positions relative to the hot plate. These height positions include at least one upper position where the substrate is loaded to and from the substrate holder, a middle position where the substrate can be preheated by heat from the hot-plate at a temperature that is lower than the temperature at which silylation of the surface of the recess film can effectively occur, and a lower position where the substrate is heated by heat from the hot plate to a second temperature that is higher than the first temperature with the second temperature being at least as high as the temperature needed to cause effective silylation of the surface of the resist film to proceed.

Turning to the outstanding prior art rejections, it is noted that the cancellation of Claims 1-17 is believed to render the anticipation rejections applied to Claims 1-4 and 8 moot as well as the obviousness rejections applied to Claims 5-7 and 9-11.

In addition, new Claims 18-37 are believed to clearly define over anything reasonably taught or suggested by any of Sakai, Herada, Maeda, Kwag or van de Ven whether these references are taken alone or in any proper combination.

In this regard, and as discussed during the above-noted interview, new independent Claims 18 and 28 include a driving and controlling section that has been clarified in terms of the substrate holder being controlled to maintain a substrate at three or more height positions while certain processing or loading of the wafer occurs. As further discussed at the above-noted interview, it is believed that the present amendment presents the functions of driving and controlling in a much clearer manner which precludes the previous reading of these three positions as existing in a continuum of positions as the wafer is lowered from a loading position to engage the substrate holder just above the heating element of either Sakai or Herada.

Furthermore, the present invention is concerned with a silylation treatment apparatus for a resist film that includes a driving and controlling section as noted. On the other hand, Sakai does not disclose a silylation treatment apparatus, instead it discloses a film-formation apparatus for forming SOD (Spin On Dielectric) film. In this Sakai apparatus, a wafer W is moved up and down by lift pins 56 relative to a work table. Unlike the present invention, however, the lift pins 56 keep the wafer maintained at rest at only two positions, i.e., a process position on the work table, and a load/unload position above the work table. Even though a plurality of other positions may be passed through during movement of these pins, this continuous movement does not meet the claim language requiring the substrate to be still at at least one middle position.

The other main reference, Herada, again discloses something other than a silylation treatment apparatus. In this case, it is a hydrophobic treatment apparatus. In this Herada hydrophobic treatment apparatus, a wafer W is moved up and down by lift pins 158 relative to a work table as in Sakai. However, once again, unlike the present invention, the lift pins maintain the wafer W only at two positions, i.e., a process position on the work table, and a load/unload position above the work table. Once again, while the pins can move between these two positions, they do not maintain the substrate in a stationary or rest state at any of these intermediate positions so that any preheating will occur.

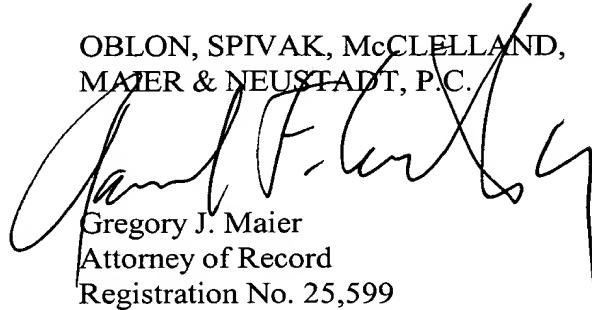
Accordingly, the two main references applied in the outstanding Office Action fail to disclose any silylation treatment apparatus, and include no suggestion as to keeping a substrate at three or more height positions as noted above.

In addition, neither Maeda or Kwag or van de Ven correct the deficiencies noted as to Sakai or Harada. Accordingly, it is believed to be clear that newly-presented Claims 18-37 clearly define over the applied references whether taken alone or in any proper combination.

If no further issues are believed to be outstanding in this application, it is respectfully urged that this application is clearly in condition for formal allowance and an early and favorable action to that effect is, therefore, respectfully requested.

Respectfully submitted,

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IN THE SPECIFICATION

Marked-up original specification showing changes in the substitute specification is attached.

IN THE CLAIMS

Claims 1-17 (Canceled).

Claims 18-37 (New).